Perinatal Care Matters

A Publication of the Regional Perinatal Programs of California *Fall, 2006*

Perinatal Profiles of California 2003 and 5-Year Cohort
10th Edition of Quality Improvement Data

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REGION 6.2
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Assuring that California's mothers and their infants receive the highest quality of perinatal care is a major goal of the Maternal, Child and Adolescent Health/Office of Family Planning (MCAH/OFP) Branch of the State Department of Health Services. ***The Perinatal Profiles of California 2003 & 5-Year Cohort*** data will be released to hospitals later this fall accompanied by ***Using Perinatal Profiles Data for Quality Improvement***. This is the tenth annual issue in a continuing series of data designed to assist regions and hospitals to systematically review their perinatal population characteristics and risk adjusted perinatal mortality outcomes.

The goal of Perinatal Profiles is to provide regions and facilities with information on their performance that may reveal where efforts in Quality Improvement (QI) are needed. Several objectives for measuring performance are considered:

- Comparing mortality rates in a hospital or within a region to the statewide mortality rates;
- Assessing sentinel indicators of the quality of perinatal care;
  - The percentage of very low birthweight infants born at hospitals without expanded neonatal care,
  - The proportion of mothers who begin prenatal care in the first trimester of pregnancy, and
  - the percentage of primary cesarean sections.

An additional objective of growing importance is to provide feedback to facilities on collection of their Vital Statistics data. This report indicates a rise in the rate of records with missing data from 8.7% to 10.4% between 1999 and 2003. Because records with missing data interfere with the accurate analysis and comprehensive understanding of the data, there is an increasing focus on reducing the proportion of records with missing data.

Nearly 2.7 million total births (fetal deaths plus live births) in California from 1999 through 2003 are represented in the data set.

Did you know, in California during 2003:

- 3.1% of births were to mothers under 18 years of age;
- while 16.9% were to mothers over 34 years of age?
- 2.9% of births were multiples (twins, triplets or higher order)?
- 6.5% of live births were born at Low Birthweight (LBW) (weighing 500 - 2,499 grams);
- while 1.1% were very low birthweight (VLBW) (500 - 1,499 grams) live births?
- 46.4% of births were to foreign born mothers?
- 85.8% of mothers received prenatal care in the first trimester?
- Primary Cesarean Sections accounted for 16.4 % of deliveries;
- while 11.5% were repeat Cesarean Sections?
- 10.4% of birth certificates had missing data in one or more key fields?

Perinatal Profiles 2003 highlights several key indicators of perinatal health, including:

- The percentage of VLBW live births delivered in Primary Care facilities was 6.1%.
- In 2003, 91.9% of VLBW infants in California were born in facilities with a NICU.
- 68.6% of VLBW infants were born at a Community or Regional level facility.
- The percentage of live births delivered in both community and regional facilities increased in 2003.
- Initiation of prenatal care in the first trimester increased from 82.2% in 1999 to 85.8% in 2003.
- Fetal mortality rates have decreased during this 5-year period with a high of 3.7 deaths per 1,000 total births in 2000 and a low of 3.3 in 2003.
- Between 1999-2003, the neonatal mortality rate has changed very little with a high of 1.8 deaths per 1,000 live births in 2000 and a rate of 1.7 every other year.
- During this same 5-year period, the neonatal mortality rate for singletons decreased from 1.5 to 1.4 deaths per 1,000 live births while the mortality rate for multiples has steadily increased from 9.1 in 1999 to 11.0 in 2003.
- From 1999 to 2003, the postneonatal mortality rate decreased from 1.3 to 1.2 deaths per 1,000 28- day survivors.

HUMAN PAPILLOMAVIRUS VACCINE AVAILABLE

The American Cancer Society estimates that annually more than 9,700 women will be diagnosed with cervical cancer and 3,700 will die from this cancer in the United States (US). In June, the first vaccine developed to prevent cervical cancer and other diseases caused by genital human papillomavirus (HPV) received wide recommendation following FDA (Federal Drug Administration) licensing as safe and effective.

At least 50% of sexually active people will get HPV at some time in their lives. Every year in the US, about 6.2 million people get HPV. It is most common in young women and men who are in their late teens and early 20s. The vaccine protects against four HPV types, which together cause 70% of cervical cancers and 90% of genital warts. Studies have found it to be almost 100% effective in preventing diseases caused by these types of HPV – including precancers of the cervix, vulva and vagina, and genital warts. This vaccine does not treat existing HPV or the problems caused by infection.

Vaccination Facts

The HPV vaccine is recommended for 11-12 year-old girls, and can be given to girls as young as 9. The vaccine is also recommended for 13-26 year-old girls/women who have not yet received or completed the vaccine series. Ideally, females should get the vaccine before they are sexually active as the vaccine is most effective in those who have not yet acquired any of the four HPV types covered by the vaccine. Females who are sexually active may also benefit from the vaccine. But benefits may be limited if they have already acquired one or more HPV type(s) covered by the vaccine. However, few young women are infected with all four so they would still receive some protection. Currently, there is no test available to tell if a girl/woman has had any or all of these four HPV types.

The vaccine is not recommended for pregnant women. If a woman finds out she is pregnant after she has started getting the vaccine series, she should complete her pregnancy before finishing the three-dose series.

The length of vaccine protection (immunity) is unknown when a vaccine is first introduced. Studies have followed women for five years and found that women are still protected. More research is being done to find out how long protection will last, and if a booster vaccine is needed years later.

The HPV vaccine is given through a series of three shots over a six-month period. The second and third doses should be given two and six months (respectively) after the first dose. The price of the vaccine is $120 per dose ($360 for full series). Studies have shown no serious side effects. The most common side effect is soreness at the injection site.

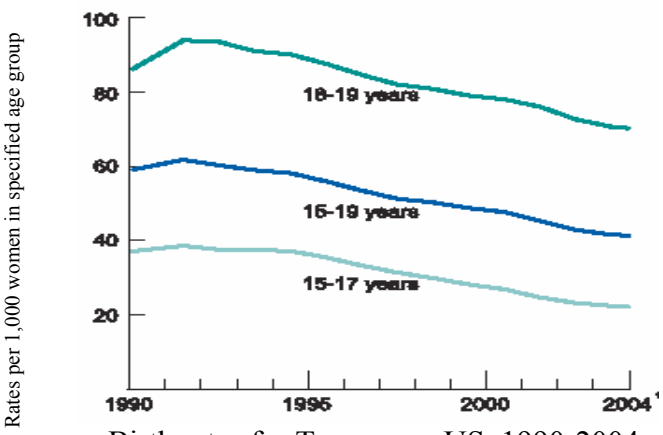
Following vaccination, women should still receive regular cervical cancer screening. The vaccine will not protect against all types of HPV that cause cervical cancer. It is also possible that women may already have acquired one of the four HPV types the vaccine does cover. Additionally, some women may not get all required doses of the vaccine so they may not get the vaccine's full benefits.

For more information visit http://www.cdc.gov/std.

PERINATAL ISSUES IN THE NEWS

Teenage birth rates declined again in 2004

In 2004, the U.S. teen pregnancy rate, 41.2 births per 1,000 females aged 15–19 years, was one percent lower than in 2003, and 33 percent lower than the rate of 61.8 in 1991. Rates fell two to three percent for non-Hispanic white and non-Hispanic black teenagers and were unchanged for most others. Rates declined modestly for teenagers 15–17 and 18–19 years, but increased slightly for ages 10–14 years.



Birth rates for Teenagers: US, 1990-2004

California's teen birth rate dropped to a record low in 2004, of 38.1 births for every 1,000 females ages 15-19, a decrease of two percent from the rate of 38.9 in 2003. The state's teen birth rate fell for the 13th consecutive year, representing a 46.3 percent reduction from its peak in 1991.

CDHS News Release 6-34, August 1, 2006.
Hamilton BE, Martin JA, Ventura SJ, Sutton PD, Menacker F. Births: Preliminary data for 2004. National vital statistics reports; vol 54 no 8. Hyattsville, Maryland: National Center for Health Statistics. 2005.

Mother's Milk Bank Seeking Volunteer Donors

Typically, summer is a time of decreased donation at most tissue banks. The Mother's Milk Bank in San Jose is no exception. Unfortunately the number of infants needing milk has not dropped but actually increased causing a shortage. Volunteer donors can call 408/998-4550 or www.milkbanksj.org to help provide this potentially life saving resource.

Cesarean Increases Subsequent Risk for Previa & Abruption

A retrospective cohort study using linked records of more than 700,000 live births and fetal and infant deaths in Missouri between 1989 and 1997 found the following among 156,475 women who had successive singleton pregnancies:

- The incidences of previa and abruption in the first two pregnancies were 4.4 and 7.9 per 1,000 births, respectively.
- The risk for previa in the second birth was 50% higher if the first birth was by cesarean, and 100% higher in the third birth if the first two births were by cesarean.
- The risk for abruption was 30% higher in second or third pregnancies when the preceding births were all by cesarean delivery.

Getahun D et al. Obstet Gynecol 2006 Apr; 107:771-8.

PRETERM BIRTH: CAUSES, CONSEQUENCES AND PREVENTION

The high rate of premature births in the United States constitutes a public health concern that costs society at least $26 billion a year, or $51,600 per infant, according to a new report from the Institute of Medicine of the National Academies. Most of the expense was for medical care, especially that provided in infancy. Maternal care, early intervention services, special education for preterm infants with learning difficulties, and lost household and labor productivity also contribute to the cost.

The IOM Committee on Understanding Premature Birth and Assuring Healthy Outcomes released it report, ***Preterm Birth: Causes, Consequences and Prevention*** this summer. The Committee was charged with the responsibility of assessing the current state of science on the causes and consequences of preterm birth. The goals are to (1) describe the current state of the science and clinical research with respect to the causes of premature birth; (2) address the broad costs; economic, medical, social, psychological, and educational for children and their families; and (3) establish a framework for action in addressing the range of priority issues, including research and policy agenda for the future.

Lessons Learned

- Preterm birth is a complex expression of many conditions.
- Little is known about how preterm birth can be prevented.
- Great strides have been made in treating infants born preterm and improving survival.
- Significant gains are needed in the area of preventing its occurrence.
- Racial, ethnic and socioeconomic disparities are striking and largely unexplained.
- Infants who are born near term (at 32 to 36 weeks of gestation) are at increased risk for adverse health and developmental outcomes that should not be ignored.

Excerpts from the Executive Summary

"In 2004, 12.5 percent of births in the United States were preterm; that is, born at less than 37 completed weeks of gestation. Since 1981, the rate has increased more than 30 percent (from 9.4 percent). There are significant, persistent, and very troubling racial, ethnic, and socioeconomic disparities in the rates of preterm birth. The highest rates are for non-Hispanic African Americans, and the lowest are for Asians or Pacific Islanders. In 2003, the rate for African-American women was 17.8 percent, whereas the rates were 10.5 percent for Asian and Pacific Islander women and 11.5 percent for white women. The most notable increases from 2001 to 2003 were for white non-Hispanic, American Indian, and Hispanic groups.

The report uses the word "preterm" for births that occur at less than 37 weeks of pregnancy; a full-term pregnancy is 38 to 42 weeks. Infants born preterm are at greater risk than infants born at term for mortality and a variety of health and developmental problems. Complications include acute respiratory, gastrointestinal, immunologic, central nervous system, hearing, and vision problems, as well as longer-term motor, cognitive, visual, hearing, behavioral, social-emotional, health, and growth problems. The birth of an infant preterm can also bring considerable emotional and economic costs to families and have implications for public-sector services, such as health insurance, educational, and other social support systems.

Babies born before 32 weeks or early preterm are most often thought of when prematurity is considered. The greatest risk of mortality and morbidity is for those infants born at the earliest gestational ages. "Near-term" or "late-preterm" infants born between 32 and 36 weeks, also face major problems. The latter group of infants also experiences a greater risk for health and developmental problems compared with the risk for infants born at term.

Preterm birth is a complex cluster of problems with a set of overlapping factors of influence. Its causes may include individual-level behavioral and psychosocial factors, neighborhood characteristics, environmental exposures, medical conditions, infertility treatments, biological factors, and genetics. Many of these factors occur in combination, particularly in those who are socio-economically disadvantaged or who are members of racial and ethnic minority groups.

Methods for the diagnosis and treatment of preterm labor are currently based on an inadequate literature, and little is know about how preterm birth can be prevented. To date, no single test or sequence of assessment measures that may accurately predict preterm birth are available, and the efforts at the prevention of preterm birth have primarily focused on the treatment of women with symptomatic preterm labor. Treatment has been focused on inhibiting contractions. This has not reduced the incidence of preterm birth but has delayed delivery long enough to allow the administration of antenatal steroids and transfer of the mother and fetus to a hospital where they may receive appropriate care. These interventions have reduced the rates of perinatal mortality and morbidity. Although improvements in perinatal and neonatal care have significantly improved the rates of survival for infants born preterm, these infants remain at risk for a host of complications. Therapies and interventions for the prediction and the prevention of preterm birth are thus needed."

Recommendations

Committee recommendations focused on three general areas:

- Establishing multidisciplinary research centers;
- Setting priorities for the research agenda; and
- Study and inform public policy.

"In addition, the report recommends that guidelines be issued to further reduce the number of multiple births -- a significant risk factor for preterm birth -- resulting from infertility treatments".

Richard E. Behrman, Adrienne Stith Butler, Editors,
For more information: http://www.nap.edu/catalog/11622.html
National Academies Press, or contact the NAP customer service department toll-free at 888-624-8373.

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Public Policy: California State Legislation 2006-2007

California Assembly Initiatives

AB2317. Koretz: Postpartum Mood and Anxiety Disorders. Status: Enrolled 8/24/06, to Governor.
This bill requires the Department of Health Services (DHS) to conduct the Perinatal Mood and Anxiety Disorders (PMAD) Community Awareness Campaign.

AB 2651. Jones: Newborns: hearing screening. Status: To Enrollment 8/31/06. This bill requires newborn hearing screening be offered to every newborn upon birth .by every general acute care hospital beginning January 1, 2008.

AB 2742. Nava: Family planning: Medi-Cal: Family PACT program. Status: To Enrollment 8/31/06
This bill would prohibit a Medi-Cal managed care plan from restricting the choice of an enrollee regarding the provider from whom the enrollee may receive family planning services, so long as the provider is a Medi-Cal provider.

AB 2818. Maze: Maternal use of narcotics: testing.
Status: As amended. Failed passage 4/25/06. Reconsideration granted. This bill would require the State Department of Health Services by January 15, 2008, to develop a legal and illegal drug use surveillance program, which shall not be implemented without subsequent statutory authorization

CALIFORNIA SENATE INITIATIVES

SB 246. Figueroa: Human milk. Status: Enrolled 9/1/06, Signed by Governor
This bill requires a hospital that collects, processes, stores, or distributes human milk collected from a mother exclusively for her own child to comply with specified standards until or unless the department approves alternative standards. It would also exempt a hospital from the tissue bank licensure and regulation requirements for the purpose of collecting, processing, storing, or distributing human milk collected from a mother exclusively for her own child. The bill would exempt from any screening test requirement human milk collected from a mother exclusively for her own child.

SB739.Speier: Hospitals: infection control. Status: Enrolled, to Governor. This bill would establish the Hospital Infectious Disease Control Program, which would require the department and general acute care hospitals to implement various measures relating to disease surveillance and the prevention of health care associated infection (HAI).

SB1555. Speier: Umbilical Cord Blood Banking: education, screening. Status: Enrolled, to Governor.
This bill would require the department to conduct the Umbilical Blood Community Awareness Campaign, which would require the department to, among other things, provide awareness, assistance, and information regarding umbilical cord blood banking options, as specified. This bill would authorize a primary prenatal care provider, as defined, to provide to a woman who is known to be pregnant, during the first prenatal visit, information developed by the department pursuant to this bill regarding her options with respect to umbilical cord blood banking.

SB1528. Bowen: Medi-Cal. Covered services: pregnancy.
Status: Enrolled, to Governor. This bill provides that home infusion treatments with tocolytic agents for pregnant women are reimbursable under Medi-Cal, subject to utilization controls and clinical guidelines.

SB 1596. Runner: Nurse-Family Partnership program.
Status: Enrolled, to Governor.
This bill would establish the Nurse-Family Partnership program, which would be administered and implemented by the department, for purposes of making grants to eligible participating counties for the provision of voluntary registered nurse home visiting services for expectant first-time low-income mothers, their children, and their families.

SB1301. Alquist: Health Facilities: reporting and inspection requirements.
Status: Enrolled, to Governor.
This bill requires general acute care hospitals, acute psychiatric hospitals, and special hospitals to report an adverse event to DHS no later than five days after the adverse event has been detected, or, if that event is an ongoing urgent or emergency threat the welfare, health or safety of patients, personnel, or visitors, not later than 24-hours after the adverse event has been detected.

- Requires disclosure of individually identifiable patient information to be consistent with applicable law.
- Defines an "adverse event" to include any of 27 specified occurrences.
- Defines "serious disability"
- Requires DHS to review the CCR requiring hospitals to report "unusual circumstances" and consider amending the section to enhance the clarity and specificity of this hospital reporting requirement.
- Requires DHS to make an onsite inspection or investigation within 48 hours or two business days, whichever is greater, of the receipt of a report or complaint.
- Requires DHS in preparing the staffing and systems analysis, as specified, to also report regarding the number and timeliness of investigations of adverse events initiated in response to reports of adverse events.
- Requires DHS, by January 1, 2013, to provide information regarding reports of adverse events and the outcomes of inspections and investigations in response to adverse event reports on DHS' web site and in written form accessible to consumers. Makes this act operative on July 1, 2007.

SB 1638. Figueroa: Midwives: advisory council: annual report. Status: Enrolled, to Governor.
This bill would provide for the creation of a Midwifery Advisory Council, as specified. The bill would also require each licensed midwife who assists, or supervises a student midwife in assisting, in childbirth occurring in an out-of-hospital setting to annually report to the Office of Statewide Health Planning and Development (OSHPD) certain information regarding his or her practice for the previous year**.**